# SITE INFORMATION

Current Site Name: ç Location: Site Number: Geographic Region: Tectonic Plate:

General Site Description: The station is located in the south-central area of the state of New Hampshire. It is

approximately 26 miles northwest of the city of Nashua and 27.5 miles west of the

city of Manchester.

Primary Scientific Purpose:

Geological Province:

Local Geology:

Site Topo Map:

## **CONTACT INFORMATION**

Site Ownership: **USA** (National Science Foundation)

Site Management: National Radio Astronomy Observatory (NRAO) through

Associated Universities Incorporated

Scheduling: **Barry Clark** NRAO/AOC Address:

P.O. Box O

Socorro, NM 87801

505 835 7268 Telephone: 505 835 7027

Fax: bclark@nrao.edu E- mail:

Contact Person: Tom Baldwin

> Address: NRAO Hancock VLBA Station

> > 70 Windy Row

Hancock, NH 03449

Telephone: 603 525 4227

> 603 525 4332 Fax:

E-mail: vlbahn@nrao.edu

### MONUMENT INFORMATION

Current Site Name: Hancock Location: Hancock, NH

Site Number: 57

Number of Observing Monuments: 1 Surveyed into National Network? Yes

Monument Number: 7618

Type of Monument: VLBA Antenna

Monument Inscription: None

Systems using Monument: 25-Meter VLBA Antenna

Latitude: N 42° 56' 00.99450" Longitude: W 71° 59' 11.68371" Elevation: 269.360 meters

Height above Ellipsoid: 295.588 meters
Geodetic Coordinate Source/Date: ATSC / 01-SEP-96
Geodetic Coordinate Datum/Ellipsoid: IERS ITRF94 (1993)

Elevation Datum: NGVD 88

Source of Monument Geodetic Survey Ties: ATSC - NASA SLR

Comments: None

## **Differential Coordinates**

Monument Number	Monument Inscription	X	Y	Z
<del>_</del>	7618 GPS PIER	4.802	35.129	12.791
_	7618 RM1 96	20.988	24.162	-4.075
<del>_</del>	7618 RM2 96	25.019	5.048	-21.297
<del></del>	7618 RM3 96	-50.203	22.576	17.339
Monument Number	Monument Inscription	North	East	Up
<u>—</u>	7618 GPS PIER	31.108	15.430	-14.659
<del>-</del>	7618 RM1 96	8.246	27.432	-14.846
<del>-</del>	7618 RM2 96	-17.593	25.354	-12.357
<del></del>	7618 RM3 96	37.894	-40.760	-15.275

### MONUMENT INFORMATION

Current Site Name: Hancock Location: Hancock, NH

Site Number: 57

Monument Description:

The station mark is a point represented by the perpendicular intersection of a plane through the elevation axis with the azimuth axis of the VLBA (Very Long Base Array) antenna. The point is not accessible and connot be occupied. It should be noted that the antenna elevation axis is offset by 2.133 meters (7 feet) from the azimuth axis.

Reference mark one is a standard NASA/GSFC brass disk epoxied flush into the top of a large section (1.4 x 2.3 meter) of outcropping granite rock. The disk is stamped "7618 RM 1 96". It is located 4.72 meters east of the NRAO VLBA facility east fenceline and 10.82 meters southeast of the facility northeast fence corner.

Reference mark two is a standard NASA/GSFC brass disk epoxied flush into the top of a northwest sloping and exposed section of granite rock. The disk is stamped "7618 RM 2 96". It is located 7.51 meters east of the NRAO VLBA facility east fenceline and 7.41 meters east of the facility southeast fence corner.

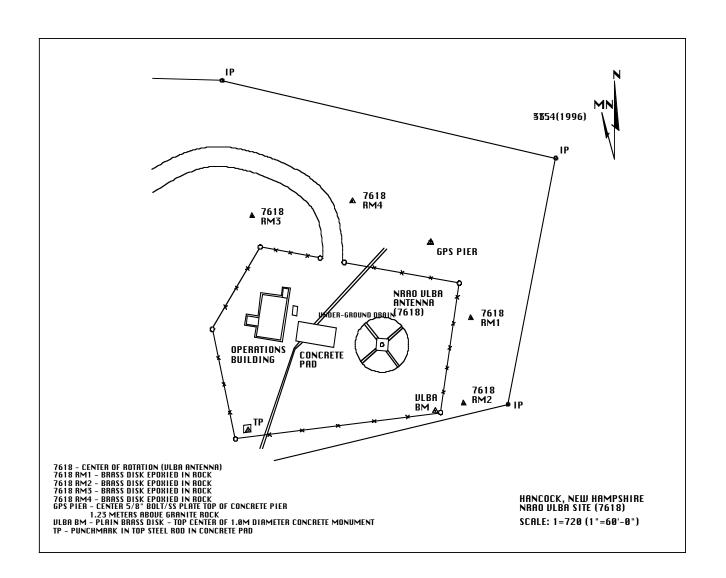
Reference mark three is a standard NASA/GSFC brass disk epoxied flush into the top of a 1.0 x 1.9 meter section of granite rock outcrop. The disk is stamped "7618 RM 3 96". It is located 9.6 meters northwest of the NRAO VLBA facility northwest fence corner and 24.66 meters northwest of the facility gate west post.

Reference mark four is a standard NASA/GSFC brass disk epoxied flush into the top of a 2.2 meter diameter section of granite rock that extends approximately 0.3 to 0.4 meters above the ground. The disk is stamped "7618 RM 4 96". It is located 18.56 meters north of the NRAO VLBA facility east gate post, 19.63 meters north of the facility west gate post and 8.90 meters northeast of the centerline of the gravel entrance road.

# SITE SKETCH

Current Site Name: Hancock Location: Hancock, NH

Site Number: 57



#### Revised 5/01/98

Source

# PREVIOUS OCCUPATION INFORMATION

Current Site Name: Hancock Location: Hancock, NH

Site Number: 57

# **SLR Occupations**

		•					
Monument Number	Occupying System	Occupation Designator	Starting Date	Ending Date			
	No	Previous Occupations					
VLBI Occupations							
Monument Number	Occupying System	Occupation Designator	Starting Date	Ending Date			
7618	VLBA	76185001	01-JAN-90	31-DEC-99			
	GF	PS Occupations					
Monument Name	Star Da	•	Ending Date	Network			
	No F	Previous Occupations					
	Fo	otprint Surveys					

No footprint surveys were completed. See the station description notes for geodetic ties to other local geodetic stations.

Starting Date

Survey